Appl. No. 10/535,581 Filed: Jan. 17, 2006

## In the Claims:

1 - 15. (Canceled)

16. (Currently Amended) A method for producing an substance immunoglobulin comprising culturing CHO cells that produce said substance immunoglobulin in the presence of a nutrient glucose-containing media that results in a degree of glucose limitation (DGL), wherein the DGL is larger than the degree of glucose limitation needed for maintenance of the cell (DGL<sub>maintenance</sub>) and the DGL ratio of the currently observed specific glucose consumption rate to the maximum known specific glucose consumption rate for said CHO cells is ≤ 0.5π, and recovery of said immunoglobulin.

- 17. (Previously Presented) The method of claim 16, wherein the DGL is  $\leq$  0.4.
- 18. (Previously Presented) The method of claim 16, wherein the DGL is  $\leq 0.3$ .
- 19. (Previously Presented) The method of claim 16, wherein the nutrient media comprises glucose and further wherein the amount of glucose is not more than 50% of that which can be maximally consumed by the maximum expected cell count without glucose limitation.
- (Previously Presented) The method of claim 19, wherein the amount of glucose is not more than 35% of that which can be maximally consumed by the maximum expected cell count without glucose limitation.
- (Cancelled)
- 22. (Previously Presented) The method of claim 16, wherein the produced substances are proteins or polypeptides.

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- 23. (Currently Amended) The method of claim 24 22, wherein the produced protein or polypeptide substances comprise fusion proteins, MUC1-IgG2a, MUC2-GFP-C-term, EPO (erythropoietin), interferons, cytokines, growth factors, hormones, PA (plasminogen activator), immunoglobulins, fragments of immunoglobulins or other glycoproteins.
- 24. (Previously Presented) The method of claim 19, characterized in that a glucose-containing medium is used which is not limiting with regard to other nutrient components before glucose limitation occurs.
- 25. (Currently Amended) The method of claim 24, wherein the glucose is fed separately from other nutrient media.
- 26. (Previously Presented) The method of claim 16, wherein the culture is carried out in a pH range of 6.7-7.7.
- 27. (Previously Presented) The method of claim 16, wherein the cells are cultured under a fed-bath or perfusion process.